

### REMARKS

Claims 1-6 are currently pending, and claims 1 and 4 have been amended. Reexamination and reconsideration of the present application is respectfully requested.

At the outset, the Examiner is thanked for the thorough review and consideration of the present application. The Examiner's Office Action dated April 3, 2003 has been received and the contents carefully noted.

In the Office Action, the Examiner rejected claims 1-6 under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Kadoi et al. (US Patent No. 5,625,002), and rejected claims 1-6 under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Junzo (JP 60-001916). These rejections are respectfully traversed.

Claim 1, as amended, is allowable, at least for the reason that claim 1 recites a combination of features, including,

“... wherein an amount of the (a) polyphenylene sulfide resin and the (b) olefin based resin is 80 weight % or more of the entire resin composition, and the content of the (b) olefin based resin is 10 to 60 parts by weight relevant to 100 parts by weight of the (a) polyphenylene sulfide resin,

wherein the (b) olefin based resin consisting of (b1) olefin based (co)polymer having functional group and (b2) olefin based (co)polymer without functional group, the contents of the (b1) olefin based (co)polymer having functional group and the (b2) olefin based (co)polymer without functional group are 10 to 40 % by weight and 60 to 90 % by weight relevant to 100 parts by weight of (b) olefin based resin, respectively, ...” [emphasis added]

None of the cited references teaches or suggests each and every element of the claims. None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention.

The Examiner alleges that the references “inherently” have “the required fuel permeability coefficient, tensile elongation and Izod impact strength, or it would have been obvious to prepare a fuel system part from blends of polyphenylene sulfide and olefin copolymer having the required properties.” Office Action at 2-3. The caselaw upon which the Examiner relies stands for the proposition that “[t]he claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable.” *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Applicants respectfully submit that the claims of the present application are patentable because the fuel permeability coefficient, tensile elongation, and Izod impact strength are not inherently present in a resin composition having similar components.

In contrast with the cited references, the resin composition of the present invention is used in a fuel system part and has a specific blend rate of components and has a fuel permeability coefficient in a specific range. As discussed at least on page 17 of the specification of this application, providing a resin composition as claimed in claim 1 provides a material with excellent fuel permeation resistance and shock impact resistance. The specific fuel permeability coefficient can be achieved by using the specific blend rate of PPS and olefin recited in claim 1. When the total quantity of olefin based (co)polymer exceeds 60 parts by weight out of 100 parts or the blend rate of olefin based (co)polymer having a functional group exceeds 10 to 40% of the total quantity of olefin based

(co)polymer, a fuel system part having inferior properties is obtained. Thus, improved flexibility and excellent oil resistance may be obtained for a fuel system part by using the claimed total quantity of olefin based resin.

Kadoi et al. discloses a resin composition comprising a polyphenylene sulfide (PPS), an epoxy group-containing olefin polymer, and at least one elastomer. Although in some examples the PPS component and the elastomer component of the resin composition in Kadoi et al. overlap the range of the PPS and the olefin based (co)polymer recited in claim 1 of the present application, there is no teaching in the various examples set forth in Kadoi et al. that there is an effect on a fuel permeability coefficient for a fuel system part.

The lack of teaching or suggestion concerning the fuel permeability coefficient is evidenced upon reviewing the examples given in Kadoi et al. Specifically, an amount of the polyphenylene sulfide resin and the olefin based resin are 55 to 99 % by weight and 0.1 to 30 % by weight, respectively, and the remainder of the composition includes an elastomer. See column 5, lines 24-33 and column 6, line 62 to column 7, line 5. In Example 19 of Kadoi et al., the blend rate of the epoxy group-containing olefin copolymer (corresponding to (b1) in claim 1 of the present application) is 50% by weight and the rate of elastomer (corresponding to (b2) in claim 1 of the present application) is 50% by weight, respectively, which is beyond the blend rate of the present application. In Example 7, the total quantity of olefin based (co)polymer and the blend rate of (b1) and (b2) in Example 5 exceed the ranges in claim 1. These ranges result in a fuel system part having inferior properties as discussed above. Applicants respectfully submit that the properties of the resin composition in the present application differ from that of Kadoi

et al. to such an extent that the fuel system part of the present invention achieves unexpected results (as shown in the examples in the present application) and a marked improvement in flexibility and oil resistance.

It can thus be understood that the Kadoi et al. disclosure does not in any way anticipate or make obvious the essential features of the present invention as set out in independent claim 1.

In contrast to the present invention, Junzo describes a resin material comprising a polyphenylene sulfide (PPS) optionally containing an elastomer which is to be brought into contact with gasoline mixed with methanol. The weight percent of these materials included in the copolymer is provided. However, the abstract of the reference does not discuss the weight percent of either the PPS or the copolymer relative to the entire composition or each other. Further, there is no description about using a specific blend rate for a total quantity of olefin having two components, one of which is an olefin based (co)polymer having functional group and the other is an olefin based copolymer without functional group.

It can thus be understood that the Junzo disclosure does not in any way anticipate or make obvious the essential features of the present invention as set out in independent claim 1.


Therefore, as the cited references fail to anticipate the present invention as recited in independent claim 1, Applicants respectfully request that the rejection under 35 USC 102(b) be withdrawn.

In addition, a combination of the references fails to render the present invention as recited in independent claim 1 obvious, Applicants respectfully requests that the rejection of these claims under 35 USC 103(a) be withdrawn.

Moreover, as claims 2-6 each depend from independent claim 1, each of these claims is also allowable for the same reasons as their respective base claims.

In view of the above remarks, the present application is believed to be in condition for allowance. A prompt notice to that effect is respectfully requested. Although no additional fees are believed to be due, permission is hereby given to charge any unforeseen fees to deposit account 50-1147.

Respectfully submitted,



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